## **REMARKS**

## Summary

Claims 1-4 and 6-16 were pending. A new listing of the claims is presented, as Claim 4 was inadvertently omitted from the claim listing in a previous response; the claims have not been amended. The specification has been amended to insert a priority claim which has been previously asserted and acknowledged.

In the present Office action, the allowance of Claims 1-4, 10-14 and 16 has been withdrawn, and a new non-final Office action rejecting all of the pending claims, being Claims 1-4 and 6-16, has issued. The rejections are based on newly cited art. The Applicants have carefully considered the reference cited by the Examiner and the arguments presented, and respectfully traverse the rejections on the basis that a *prima facie* case of obviousness has not been made out.

## Rejections

35 U.S.C. § 103 (a)

Claims 1-4 and 6-16 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Ohtaka et al. (US 6,151,000; "Ohtaka").

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). In making such a rejection, the Examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. *Id.* In the present case, the Examiner accepts that the cited reference does not teach explicitly a first and a second black level of the digital image. (Office action, page 3, lines 7-8) In effect, the Examiner takes Official Notice of in lieu of producing a reference to overcome this deficiency in the *prima facie* case. Official Notice is appropriate only where the proposition at issue is supported by common knowledge or capable of unquestionable demonstration. See *In re Knapp-*

Monarch Co., 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961). See also In re Cofer, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Cf. In re Eynde, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) (court will not take judicial notice of the state of the art). "Assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art . . . ." In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418,420 (CCPA 1970); accord In re Pardo, 684 F.2d 912, 917,214 USPQ 673, 677 (CCPA 1982). Moreover, when making a rejection under 35 U.S.C. § 103 (c) the burden is on the Examiner to set forth the case, including the factors required under Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), which has not been done.

In making the rejection, the Examiner relies solely on the figures of the reference, and does not cite any aspect of the specification of the reference. The Applicants respectfully submit that this has resulted in the mis-characterization of the function of many of the elements shown in the figures of the reference. If the Examiner intends to continue to assert the rejections, the Applicants respectfully request that specific reference to the specification descriptions relied upon be provided.

The Applicants respectfully traverse the Examiner's assertions as to the correspondence between elements and limitations taught by the figures of Ohtaka and the elements and limitations of the claims of the present application.

Claim 1 recites, *inter alia*, a black level setting mechanism to set a first black level of the digital image data by adjusting a lower-limit reference voltage of the A/D converter.

The Examiner asserts that this is done by the pulse generator (306) which has "a black level setting mechanism to set a first black level ...by adjusting a lower-limit reference voltage of the A/D converter...." (Office action, page 2, last 3 lines, bridging page 3, line 1.) The Applicants respectfully submit that this description of the A/D converter, and the control thereof, constitutes an impermissible reading of the language

of Claim 1 into the description of Fig. 9 of the reference. For example, an electronic word search of the reference finds only one mention of the A/D converter 302, where it is described as "an A/D converter 302" (Ohtaka, col. 6, lines 45-46). As such, there is no recitation or suggestion of the aspects of an A/D converter that the Examiner has alleged: specifically, the "adjusting a lower-limit reference voltage ...."

Further, Ohtaka is directed towards control of brightness in a plasma display, in which graduations of brightness are represented by control of the length of the light-emitting time. Although there may be a change in the number of gradations depending on the area, there is no suggestion of a change in the lower limit (black level) of the gradations as is suggested by the Examiner.

There are other aspects of the Examiner's rejection of Claim 1 which the Applicants respectfully submit are subject to similar traversal. However, in the interest of efficiency of prosecution these are not addressed, as the arguments set forth above clearly demonstrate that a *prima facie* case of obviousness has not been made out, as not all of the elements and limitations of Claim 1 are taught or suggested by the reference.

Claims 2-4 are dependent on Claim 1 and are allowable, without more. Claim 6 recites subject matter analogous to Claim 1, and is allowable for at least the same reasons. Claims 7-16 are dependent on Claim 6, and are allowable, without more.

Moreover, Claims 2-4 and 7-16 are independently patentable over the reference. In rejecting Claims 2, 7 and 11, for example, the Examiner asserts that "the parameter selector inherently includes a component like a variable resistor ...." (Office action page 3, lines 2-5 from the bottom.) From the specification, it is evident that the parameter selector 305 operates on digital data, and it would be contrary to ordinary design practice to find a variable resistor in such a circuit. Moreover, nothing in the reference teaches or suggests that the black level of a display is set by a variable resistor. Again, the Examiner's arguments consist of using the wording of the claims in the present

application to describe elements shown in a block diagram of a figure in the reference. All of the evidence must be found in the reference. Therefore, a *prima facie* case of obviousness has not been made out, and Claims 2, 7 and 11 are patentable.

Further, with respect to Claims 3, 8 and 12, the Examiner asserts that the reference teaches "a black level setting mechanism comprising an illuminance sensor to detect the illuminance around a video camera that outputs said analog image signal." (Office action, page 4, lines 4-5.) Neither the figures nor the specification of the reference describe an illuminance sensor or a video camera. In the event that the Examiner intends to maintain the rejection, the Applicants respectfully request that specific reference to the illuminance sensor and the video camera, as the Examiner asserts are described in Ohtaka, be provided in the next Office action. Absent such a recitation, the Applicants respectfully submit that a *prima facie* case has not been made out and that Claims 4, 9 and 13 are independently patentable.

With respect to the rejection Claims 4, 9 and 13, amongst other aspects, the Examiner continues to assert that the reference contains a teaching regarding an "illuminance sensor". The reference is directed towards display technology and contains no mention of an "illuminance sensor". Nor, as mentioned above, is there any indication in the reference that "black level setting mechanism outputs a lower-limit reference voltage corresponding to illuminance detected by said illuminance sensor." (Office action page 4, lines 13-15). As such, the Applicants respectfully submit that a *prima facie* case has not been made out and that Claims 4, 9 and 13 are independently patentable.

And, with respect to Claims 14, 15 and 16, the Examiner asserts that Ohtaka teach 3 display areas, "where the different display areas are separated from each other by some line (see Fig. 8c) corresponding to a blanking marker signal corresponding to a single pixel between the blank area and the image display area such that a white line is vertically displayed on the screen which separates the blank area and the image display area." (Office action, page 4, lines 18-21.) The Examiner's

description of the figure is neither supported by the reference specification, nor by visual inspection of the figure. Without the presence of drawing lines to indicate the boundary between two areas in a figure, there would be no showing of two or more areas. In any event, the lines defining the various areas in the figure are black, and no justification has been provided by the Examiner which suggests that they would be displayed as white; nor is there anything in the reference to support the Examiner's position that the drawing lines correspond to pixels. The drawing lines do not correspond to pixels unless the reference teaches or suggests such a correspondence, and it does not. For at least these reasons, a prima facie case of obviousness has not been made out and Claims 14, 15 and 16 are independently allowable.

For at least the reasons given above, the Applicants respectfully submit that a prima facie case of obviousness has not been made out against any of Claims 1-4 and 6-16, and that all of the pending claims are allowable.

## Conclusion

The Applicants respectfully submit that Claims 1-4 and 6-16 are in condition for allowance request that a Notice of Allowance issue.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully-submitted,

Anthony P/Curtis, Ph.D. Registration No. 46,193

Agent for Applicants

**BRINKS HOFER GILSON & LIONE** P.O. BOX 10395 CHICAGO, ILLINOIS 60610 (312) 321-4200